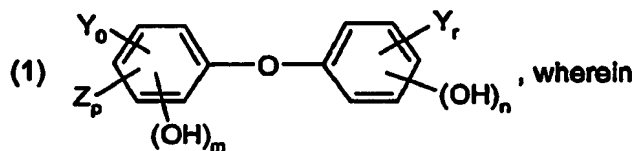


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What is claimed is:

## 1. Use of

(a) a halogenated hydroxydiphenyl ether compound of formula



Y is chlorine or bromine,

Z is SO<sub>2</sub>H, NO<sub>2</sub>; or C<sub>1</sub>-C<sub>4</sub>alkyl;

m is 0 or 1;

n is 1 or 2;

r is from 0 to 3;

o is from 1 to 3; and

p is 0, 1 or 2;

as a melanogenesis inhibitor and for lightening the skin.

## 2. Use according to claim 1, wherein in formula (1)

m is 0; or 1;

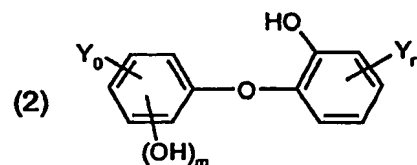
n is 1; or 2;

o is from 1 to 3;

p is 0; or 1; and

r is 1 or 2.

## 3. Use according to claim 1 or 2, wherein the hydroxydiphenyl ether compound corresponds to formula



wherein

m is 0; or 1;

o is from 1 to 3; and

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r is 1 or 2.

4. Use according to claim 3, wherein in formula (2)

m is 0;

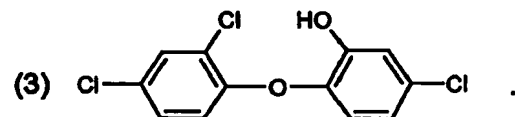
and o and r are as defined in claim 3.

5. Use according to claim 3 or 4, wherein

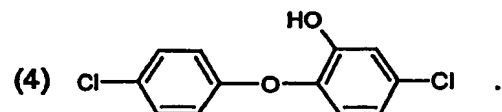
o is 1 or 2; and

r is 1.

6. Use according to any one of claims 1 to 5, wherein the hydroxydiphenyl ether compound corresponds to formula



7. Use according to any one of claims 1 to 5, wherein the hydroxydiphenyl ether compound corresponds to formula



8. Use according to any one of claims 1 to 7, wherein the hydroxydiphenyl ether compound of formula (1) is used simultaneously for the antimicrobial treatment of the skin and mucosa and also of integumentary appendages (hair).

9. Use according to any one of claims 1 to 8, wherein there is additionally used, as component (b), a further skin-lightening substance.

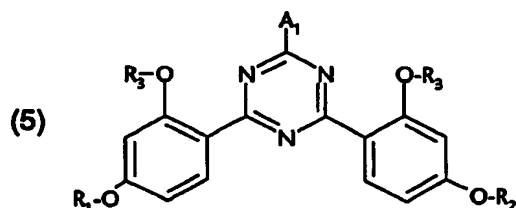
10. Use according to any one of claims 1 to 9, wherein component (b) is selected from kojic acid, arbutin, quercitin, aloesin, azelaic acid, guaiol, ellagic acid and ester compounds thereof and fluorescent whiteners.

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11. Use according to any one of claims 1 to 10, wherein the ratio of components (a) : (b) is 1 : 99, especially 5 : 95, and more especially from 10 : 90 to 99 : 1, preferably 95 : 5, and especially 90 : 10 % by weight of component (b).

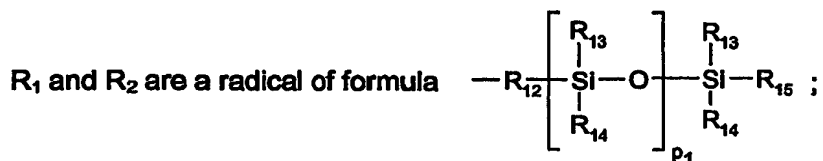
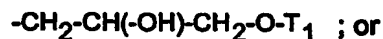
12. Use according to any one of claims 1 to 11, wherein the composition additionally comprises, as component (c), one or more UV-A and/or UV-B absorbers.

13. Use according to claim 12, wherein there is used as UV-A or UV-B absorber a compound of formula



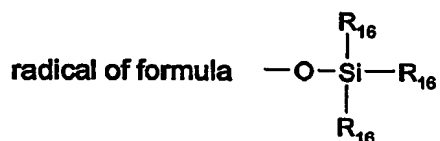
wherein

$R_1$  and  $R_2$  are each independently of the other  $C_1$ - $C_{18}$ alkyl;  $C_2$ - $C_{18}$ alkenyl; a radical of formula



$R_{12}$  is a direct bond; a straight-chain or branched  $C_1$ - $C_4$ alkylene radical or a radical of formula  $-C_{m_1}H_{2m_1}-$  or  $-C_{m_1}H_{2m_1}O-$  ;

$R_{13}$ ,  $R_{14}$  and  $R_{15}$  are each independently of the others  $C_1$ - $C_{18}$ alkyl;  $C_1$ - $C_{18}$ alkoxy or a





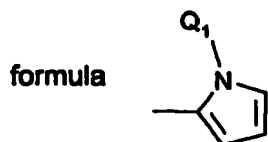
$R_{16}$  is  $C_1$ - $C_5$ alkyl;

$m_1$  and  $m_3$  are each independently of the other from 1 to 4;

$p_1$  is 0 or a number from 1 to 5;

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$A_1$  is a radical of formula ,  or of



$R_3$  is hydrogen;  $C_1$ - $C_{10}$ alkyl,  $-(CH_2CHR_5-O)_{n_1}-R_4$ ; or a radical of formula



$R_4$  is hydrogen; M;  $C_1$ - $C_5$ alkyl; or a radical of formula  $-(CH_2)_{m_2}-O-T_1$ ;

$R_5$  is hydrogen; or methyl;

$T_1$  is hydrogen; or  $C_1$ - $C_8$ alkyl;

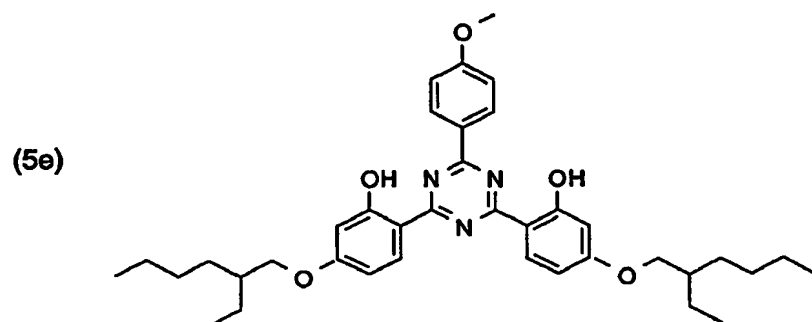
$Q_1$  is  $C_1$ - $C_{18}$ alkyl;

M is a metal cation;

$m_2$  is from 1 to 4; and

$n_1$  is 1-16.

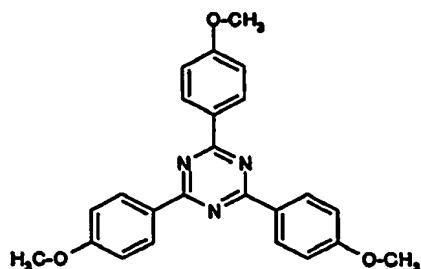
14. Use according to claim 12 or 13, wherein the composition comprises as component (c) the compound of formula



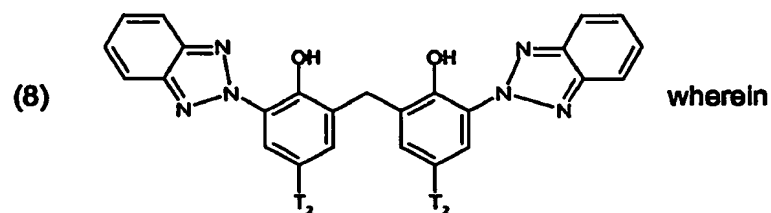
15. Use according to claim 12 or 13, wherein the composition comprises as component (c) the compound of formula

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(5f)



16. Use according to claim 12, wherein the composition comprises as component (c) the compound of formula



$T_2$  is  $C_1$ - $C_{12}$ alkyl.

17. Use according to claim 16, wherein

$T_2$  is Iso-octyl.

18. Use according to claim 12, wherein the composition comprises octyl methoxycinnamate as component (c).

19. Use according to claim 12, wherein the composition comprises benzophenone-3 as component (c).

20. Use of a composition according to any one of claims 1 to 19 for lightening the skin.

21. Use of a composition according to any one of claims 1 to 19 in cosmetic formulations.

22. Use according to claim 21, wherein the composition is used in the form of an oil-in-water formulation, in a solvent formulation or in the form of a paste formulation.

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23. Use according to claim 21 or 22, wherein the proportion of the mixture in the formulation is from 0.01% to 10% parts by weight.

24. A cosmetic formulation, comprising

- (a) a compound of formula (1); and optionally
- (b) further skin-lightening active ingredients, and optionally
- (c) one or more UV-A and/or UV-B absorbers, and optionally
- (d) an antioxidant and also cosmetically acceptable adjuvants or carriers.

25. A cosmetic formulation according to claim 24, containing

from 0.001 to 10 % by weight, preferably from 0.05 to 1 % by weight, component (a),  
from 0 to 10 % by weight, preferably from 0.05 to 1 % by weight, component (b),  
from 0 to 30 % by weight, preferably from 0.1 to 15 % by weight, component (c), and  
from 0 to 30 % by weight, preferably from 0.1 to 15 % by weight, component (d).

26. A cosmetic formulation, containing

from 0.05 to 2 % of component (a), selected from the compound of formula (3) or (4),  
from 0.01 to 2 % of component (b), selected from the compound of formula (FW 19),  
from 0.05 to 2 of % component (d), selected from the compound of formula (AO 26) and  
(AO 27).

27. Use of a formulation according to claim 26 in surfactant-containing cleansing compositions.

28. Cleansing composition, comprising

0.05 to 2 % b.w. of component (a),  
0.001 to 2 % b.w. of component (b),  
0 to 2 % b.w. of component (c),  
0 to 2 % b.w. of component (d), and  
0.1 to 10 % b.w. of one or more synthetic detergents or soaps or a combination of such substances.